

INSTITUTE OF EDUCATION SCIENCES

U.S. DEPARTMENT OF EDUCATION

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WEBINAR:

OVERVIEW OF THE EVALUATION OF STATE

AND LOCAL EDUCATION PROGRAMS:

A NEW GRANT PROGRAM AT THE INSTITUTE

OF EDUCATION SCIENCES

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THURSDAY

AUGUST 7, 2008

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PROCEEDINGS

Slide One:

Dr. RUBY: Good afternoon everyone. This is Allen Ruby at the National Center for Education Research (NCER). I'll be going through the slides with you. And if you have a question, please e-mail that in and I'll respond to them as they come in.

Slide Two:

I want to talk about the agenda, what I'll go over today. And let me first state that everything we are covering today is in the Request for Applications. This talk doesn't substitute for that request but if you've read that, this may be a bit repetitive for you.

So we'll take a quick look at IES and its grant programs, its research priorities, and then the purpose of its new grant program for the evaluation of state and local education programs.

Then we will go specifically into the types of programs and policies that we would like to see evaluated under this grant program, talk a bit about the research narrative, which would make up the bulk of your application, and then just give a little information on the grant and the review process.

Slide Three:

So just to give you a quick look at the bureaucratic structure of IES, you see there are four centers. I am with the first center, the National Center for Education Research and our sister center, the National Center for Special Education Research, which provides the bulk of the grant funds in the center.

Slide Four:

Our long-term goals are pretty much to identify what works to improve education, and primarily to improve student academic achievement, but also to identify what doesn't work so that folks don't spend time or resources on those types of things and maybe look for alternatives.

And finally to figure out what works for whom, or where, since many programs and policies don't work for every type of student or every type of school or every type of teacher.

Slide Five:

The outcomes of interest we look at are grade- or grade-level specific. For prekindergarten, we are interested in seeing impacts on readiness for schooling, which are defined as pre-reading and writing, and early math and science, as well as social development, and developmental outcomes for infants and toddlers with disabilities.

Slide Six:

For K-12, you can see the outcomes of interest are reading and writing, math and science, behavior and social skills that support learning and transition, and functional skills that support independent living for students with disabilities.

Slide Seven:

For post-secondary, we are interested in enrollment in postsecondary education and completion of postsecondary education.

And then for adult education: basic reading, writing, and mathematics.

Slide Eight:

Most of the people who get grants from us are looking at independent variables such as curriculum, instruction, assessment, quality of the education workforce, and programs and policies.

And you will note the first four can all fit under programs and policies. You can either develop the curriculum or you can try out a curriculum at the policy level. And the same would be true for instructional techniques or assessments or teacher or principal programs.

Slide Nine:

And then we have a multi-set of research grants, both for research and research training. We have education and special education research grants programs.

And under these there are specific topics. So, for example, under the education research programs, there are 13 different topics and 10 different topics under the special education program. And these are in a separate Request for Applications you can find on our website.

We also have Predoctoral and Postdoctoral Research Training Grant Programs. And they have a separate Request for Applications.

We have a set of National Research and Development Centers. And this year there will be three of them coming up for competition in the October competition. And they will be for rural education, for turning around low-performing schools, and for teacher effectiveness. And if you have any interest in those, you should feel free to e-mail or give me a call about them.

We have a new grant program called Statistical and Research Methodology in Education, which is held every June. So that competition was already held this year to develop new methods for education research.

Slide Ten:

And then, of course, we have the new one I'm talking about now, the Evaluation of State and Local Education Programs and Policies.

So the reason for this grant program is that states and districts are trying very many interventions before research on them has been done—or at least enough research to determine how effective they are. And so we wanted to take advantage of what the states and districts are doing.

And sometimes they don't have the time or the resources to evaluate their work, this seems like an opportunity that as long as the states and districts were doing something new, we could provide funding to have evaluations of them.

And this would then lead to results that would be useful to both the research community and to other states and districts.

Underlying this, of course, there is the underlying agenda, which is, in part, to try to foster more evaluation by states and districts as well as trying to get the academic

research community more interested in what states and districts are doing and to create partnerships between two of them.

Slide Eleven:

So the first issue is when we talk about state and local programs and policies, what kinds are we looking for under this grant program to be evaluated? And the first point is that they should be implemented by a state or a district.

It is not trying an intervention developed outside by a research agency or university that then is testing it in a state or a district. It is not by some other agency that may work in a school or with school-age populations.

It is really looking at what the education agency in the state or the district is trying and will be implementing, regardless of whether or not we were supporting the evaluation of it.

And these programs or policies should be aimed at improving student achievement. This could be directly -- you could have some of the outcomes of interest we discussed earlier such as K-12 math and science or post-secondary college enrollment.

But, of course, there will be some indirect outcomes that are affected. If you are trying to effect teacher quality or principal roles or school organization, there are going to be some intermediate variables before you get to the student achievement variables.

And in those cases where you don't expect that you would see an impact on the student achievement within the five years of this grant, it is possible to argue in this program that you are looking at an intermediate outcome that is known to have a beneficial impact on student achievement.

It's just that you don't have time to track that during this evaluation. So your evaluation will only focus on that intermediate outcome. But overall, the goal should be on improving student achievement.

Slide Twelve:

In addition, these programs or policies have to be fully developed before the grant starts. That would mean that all the supports are in place. If it is a program, all the materials would be available for distribution.

If it is a policy, it is a policy that is going to go into effect by the time the grant starts. And there is an enforcement mechanism or a funding mechanism to ensure that the policy actually takes place.

There is really no time or funding built into this grant for the development of the program or policy. There is time if mid-course revisions are made by the state or the district. That, of course, is acceptable. But the money can't be used for funding or developing those types of revisions.

Slide Thirteen:

The programs or policies should be widely implemented -- states or several states together or several districts or a large district across them all.

If you are working -- for example, if you are a small district with only several schools that are going to be affected, it makes much more sense to work together with other districts to try to get a larger implementation.

There has to be evidence that it is being implemented now or it will be implemented in the future. Again, as I said before, if it is future implementation, it is showing that there is money appropriated to implement it or there is an authority in charge of enforcing the policy or something of that nature to show that it is not just a law or regulation that has been passed but it may not go into effect or it may not be fully implemented over the next year or two.

It should be large enough so that generalizations can be made. And it should be on a large enough scale and across a variety of conditions so there can be subgroup and moderator analysis.

And it should be implemented under typical implementation conditions so if the state or the district were implementing it without this evaluation program, it should be the same type of implementation as if this evaluation program were taking place.

Slide Fourteen:

It should be a substantial modification of an existing practice. Now that can be a modification of current practice in the state or district -- what they are doing now -- or it could be considered a practice done by other districts or states.

So, for example, if you have a program or policy that has been ongoing for several years but it is very different from what is going on in other states and districts and it hasn't been evaluated yet, then it would be worthwhile to evaluate it under this program so that other states and districts could learn from it.

And at the same time, it should be adoptable by other states and districts so it is not dependent on some condition that is solely available in that state or this district.

Slide Fifteen:

So somebody -- well, okay, so let me move over now to the research narrative. This is the major part of your application, 25 pages, single-spaced. And it has four sections. I'm getting a question here but it is not showing up quite right.

So if a project is already in place as the result of a prior grant to one university to work with districts and we want to extend the project by seeking funding here as an evaluation, is that okay?

The key point here is this sounds like this is a university trying a program or a policy in a district rather than a district-started program or policy. If that is the case then, of course, this couldn't be used to evaluate that.

But on the other hand, if the district has decided that it likes this program that the university is implementing and wants to extend it to the entire district or to several districts, then you could apply to this grant to evaluate that program if it met all the other conditions we just talked about regarding the policies and the programs.

Slide Sixteen:

So let me go back to the research narrative, which has four sections: the significance, the research plan, personnel, and resources.

The significance: you want to describe the program and policy in great detail. Just make the assumption that the peer reviewers will know nothing about the program or the policy.

So, go over all the components, describe who is responsible for implementing each component, describe all the outcomes to be affected. Assume you are talking to an educated person who is ignorant just in what you are talking about -- and that they want to know how this program or policy is going to work and what effects it will have.

Slide Seventeen:

Point out what the theory of change is. How is this program or policy expected to improve student achievement? And any intermediate variables it may affect first. And here it is actually quite helpful to use some graphics and logic models or flowcharts. Make it pretty quick for a peer reviewer to see what is supposed to happen.

And then describe the outcomes to be affected, student achievement, and any intervening outcomes, and why you expect this program or policy to have an effect on those outcomes.

Slide Eighteen:

It is very important to note how it is different from current program or policy. Again, if the reviewers are not knowledgeable about it, they may consider it as a fairly normal thing. Why would it have any different effect than what is ongoing now?

So you want to describe what the comparison group is receiving and show that this new program or policy is substantially different. And then, therefore, why it would have major impacts and improvements and increase student achievement.

Slide Nineteen:

And, as we talked about earlier, you want to show wide implementation, current or by the time the project starts -- that it will be on a sufficient scale under a variety of conditions but under a typical implementation condition. And you want to show that it is feasible -- that, as we talked about earlier, it is fully developed, there are supports in place.

Here you can draw on evidence. If other districts or states have tried a similar program or policy and succeeded in implementing it, you can cite that as well.

And describe where the funding is coming from; this is very important for large-scale evaluations. As you can imagine, over-time evaluations often don't get off the ground because implementation has not occurred.

And implementation often does not occur because the money isn't there to make it occur. So it is very critical to show that the program or policy will be implemented regardless of whether or not this evaluation takes place.

Slide Twenty:

Okay, moving on to the research plan. So, just up front state your research questions and hypothesis and describe your sample. What are you drawing from? How are you selecting? Whom are you including and excluding?

And it is very important to discuss attrition because we are talking about a program or policy that you are going to be following for 3 to 5 years. There is a good chance we'll lose a fair number of students there. So how are you going to try to reduce that loss?

Slide Twenty One:

Randomized Control Trials are the preferred design. And if you can use one, you want to note its unit of randomization and why you are randomizing there, how you are going to be randomizing in detail.

We know that there can be resistance by parents, by schools, by teachers to randomized control trials. So, you may want to consider some of the alternative methods that are used that provide a treatment to everyone involved, such as a staggered rollout, where you start the program for 1 or 2 years in one group of schools or classrooms. And then follow it up by providing it to the control classrooms 1 year or 2 years down the road. So you can use them in the short term for a control.

Or you may want to use variations in treatment, where you give different levels or types of treatment to the different groups. And, therefore, they are comparing them to each other. And that way all students or all teachers are getting some sort of treatment.

Slide Twenty Two:

If you can't use a Randomized Control Trial, just clearly state why. Why was it not possible to be done in this situation? And then discuss what alternative you are going to be using. Some of the more powerful ones are some of the Regression Discontinuity Designs or the well-designed Quasi-Experimental Designs. And just discuss how those will work and what you will be doing with them.

It is important to show that you have enough power so that the chances of finding significant results are high enough that it makes it worthwhile to fund this project. And provide enough details of your power analysis and the method you used so that the peer reviewers can actually check your power calculations. This is important because the peer review panel is made up of both substance people and methodology people. And there is always one methodology person who wants to check your power analysis.

And if you don't give them enough details, they get very frustrated. On the other hand, if you've done the power analysis correctly and you do give the details, then they are quite satisfied. And they let it be known to the rest of the panel that your power analysis is correct.

Slide Twenty Three:

Describe your outcome measures, the outcomes of interest in detail. This grant is looking for outcome measures that are relevant to states, districts, and schools. So, often this would be things like achievement scores or proficiency levels, or in some cases grades perhaps, or graduation rates, or dropout rates.

Not as interesting are those things we find in the research literature, those specific tests or assessments used to measure smaller details that states and districts are not using in their decision making on students.

Discuss the reliability, validity, and appropriateness and link them back -- they should be in your theory of change. And you can link them back to your theory of change here as well.

Also important will be discussing your fidelity of implementation and what measures you will be using. This is very important because over the past few years, we often find that if a program or a policy doesn't work, there are often three reasons why it might not work.

First, it just wasn't implemented well. Second, it was implemented well but the control group was actually receiving something very similar. Third, the program or the policy didn't work. And so we can't tell which of these is correct unless there is a very good fidelity of implementation study done along with the evaluation.

And so you want to know what is going on in the treatment group, what they are actually getting, and what they are actually getting in the control group so we can make a determination of why impacts are or are not occurring.

Slide Twenty Four:

And then a little further on that: talk much more about the comparison group -- who makes it up, how are they similar and different from the treatment group, are they receiving something in place of the treatment? They are undoubtedly receiving something during that time or that class period (or perhaps if they are a teacher, they are not receiving something).

And then, how will contamination be avoided? But I don't want to overemphasize contamination. If it makes more sense to try out a program in a school within classrooms, rather than between schools just for power reasons, then I would suggest you go that way and just try to put some barriers in place to reduce contamination rather than moving up to the school level, where you will need a lot more schools to be involved in the study just to totally avoid contamination.

Slide Twenty Five:

Discuss your mediating and moderating variables -- these would have been identified back in your theory of change -- and how you will measure them in both the treatment and the control groups. Also, detail your data analysis procedures quite a bit so again the methodologists or the statisticians in the peer review panel can follow exactly what you are doing.

If you are using a model, it is very helpful to describe the model, to provide the equation, to show how it is linked back to your original design. Note what software you are using and how you are addressing the mediators and moderators and the fidelity of implementation in your data analysis.

Slide Twenty Six:

And then this grant also requires a cost analysis. This is so that other districts and states can understand how expensive it would be to implement the policy or the program.

But it doesn't require a cost effectiveness or cost benefit analysis, although if you wanted to do one, you could, of course, include that as well.

Slide Twenty Seven:

The next section discusses your personnel. This is usually a much smaller section. But really the key point here is you are trying to show that you have personnel who are capable of doing everything you have promised to do.

So, if you are working in a specific content area, you want to show that you have a person who is an expert in that content. If it is a specific type of intervention, you want a person who is an expert in that. You want someone who understands your research

design. You want somebody who can look at implementation and somebody who can actually do the statistical analysis.

So it is really key there just to list each person, know what they are responsible for, and know why and how they have the expertise to do what you are asking them to do as part of the project.

If you don't have expertise in one area, then we really would ask you to consider partnering with another organization or with another person who has that expertise because it will just make your proposal that much stronger.

If you are working together, if a district and a state are working together with a research organization, you want to show that the district and the state personnel are having a very large role in the evaluation as well because, as I talked about before, one of the underlying purposes is to help districts and states learn how to do evaluations if they are not that capable of it, or to get their personnel involved in doing evaluations to get more experience.

Now, in this grant program the district or the state agency can apply alone or they can apply with an outside organization. And if they apply with someone else, they can both -- either of them can be the primary. We're not asking one or the other to be the primary. It is the one that is most comfortable receiving the grant and submitting the grant that should take the lead on it.

Slide Twenty Eight:

And then the resources. This is showing that the institutions involved have the capacity to carry out the evaluation -- not only the personnel but some of the other resources you may need -- the computing power, the support people necessary to do such a large evaluation.

And even though this is coming from a state, or a district has to be heavily involved, it is very important that the peer reviewers see that the key decisionmakers in the state or the district understand what this evaluation entails and support it.

So if it is coming from a state, it is nice to have the state superintendent and a state director's evaluation, and any assistant superintendents' who would be involved in this area. Just sign a letter saying here is what the evaluation will do; we understand our role in it is this, and we fully support that it be carried out.

If it is a district, (the above applies for) the same kind of personnel in the district. And if there are two -- if the state and the district are coming in with a research organization, it is good to have in that letter what the research organization is responsible for and what the state is responsible for so that it is clear to the peer reviewers that there is an agreement here between the district and the research organization; they clearly define roles and they know what each other is doing. And they support what each other is doing.

Slide Twenty Nine:

Just some basic grant information: the typical grant size would be \$0.5 million to \$1.2 million a year. That is direct and indirect costs.

If you are smaller, you can ask for less money. And if you are larger, you can ask for a little bit more money. But the key point is that your budget be justified. And there

is another section called budget justification where you explain how the money will be used.

The grant can last up to 5 years but it doesn't have to be 5 years long. And it can only be used for evaluation. It can't be used for implementation.

The application is due October 2 by 4:30 p.m. Eastern Standard Time, with an expected start date of July 1.

We also originally asked for letters of intent, but those were due back on August 4. If you didn't send one in, that's fine. But it would be helpful if you could send me an e-mail saying you are planning on applying. And this is the topic area you are going to apply in or the type of program and policy you want to look at.

And the reason for that is then I can turn that over to the office called the Office of Standards and Review, which is responsible for the peer review process. And that way they know what type of reviewers they need to recruit.

So if there is a specific topic area you are working in, they will try to go out and find somebody who knows that topic area who can give a fair review to your proposal. Otherwise, the proposal might be reviewed by someone who is less familiar with the topic area.

There is an application package posted at grants.gov. This is the federal agency grants program. The grants package is under the CFDA 84 number. And this is also in the Request for Applications.

This is separate -- this grants.gov is not run by us. It's run by a separate organization, so if you have any trouble there is a help line they can help you with.

Slide Thirty:

But we do suggest you register ahead of time to use grants.gov. That takes up to a week to get you registered. So it would make sense to go in soon and just get yourself registered and get familiar with the application package.

Grants.gov: during the week that grants are due, it can come under strain as lots of people are uploading their applications. So we also suggest that you try to upload several days before the deadline just to avoid any problems in case their website is overloaded on the day of the deadline.

Slide Thirty One:

When your application comes in, it is reviewed for compliance just to make sure it contains all the sections asked for and all the other forms that need to be filled out.

It is then assigned to a review panel. Two to three members of the panel will conduct a first review of the applications. Those that are scored high go to their full panel at the panel meeting and they are scored by the full panel there.

And if they receive an award of outstanding or excellent, they are then recommended for funding.

Slide Thirty Two:

Applicants then receive notification of the status of their application. And you receive copies of your reviewer comments. It is very normal for applications not to be successful their first time but to come back in resubmission after taking into account the

review comments and working with your program officer, and then receive an award the second time.

So an initial rejection should not be taken as a reason for not resubmitting it a second time.

Slide Thirty Three:

And finally just some of the contact places. There is the IES website -- where the requests for application for this grant program are. There is the grants.gov website where you actually make your application.

And then there is my e-mail and my phone number. And please feel free to contact me. That's my job here; I'm not involved in the peer review process at all.

My job is really to work with potential applicants to give them advice or to help them on how to structure their application or how to structure the design of their evaluation. So if you would like to, please do take advantage of that.

And that is the end of the presentation. I don't see that we have any more questions. So, thank you for your time. And, again, if you'd like, please do contact me.